AATCTTTTATTTTATCGATGTTAACAAGCTTAGTAATCGATGCCACGTCGAGGGGTGTCGACC
CACGCGTCCGGGAGTAGGTTGAGCTCGCCTGTTCTCCCATTGTCAGCCAGTCTATTTCCAG
ATTGTTTGAACTTCTCTGGCCGCACAATACAGGAAGGAAGACTAAAGCAGCAAAGGGACCTA
CAGCGTCTGCAGCATGGGCTGGTTAACTAGGATTGTCTGTCTTTTCTGGGGAGTATTACTTA
CAGCAAGAGCAAACTATCAGAATGGGAAGAACAATGTGCCAAGGCTGAAATTATCCTACAAA
GAAATGTTGGAATCCAACAATGTGATCACTTTCAATGGCTTGGCCAACAGCTCCAGTTATCAT
ACCTTCCTTTTGGATGAGGAACGGAGTAGGCTGTATGTTGGAGCAAAGGATCACATATTTTC
ATTCGACCTGGTTAATATCAAGGATTTTCAAAAGATTGTGTGGCCAGTATCTTACACCAGAAG
AGATGAATGCAAGTGGGCTGGAAAAGACATCCTGAAAGAATGTGCTAATTTCATCAAGGTAC
TTAAGGCATATAATCAGACTCACTTGTACGCCTGTGGAACGGGGGCTTTTCATCCAATTTGC
ACCTACATTGAAATTGGACATCATCCTGAGGACAATATTTTTAAGCTGGAGAACTCACATTTT
GAAAACGGCCGTGGGAAGAGTCCATATGACCCTAAGCTGCTGACAGCATCCCTTTTAATAGA
TGGAGAATTATACTCTGGAACTGCAGCTGATTTTATGGGGCGAGACTTTGCTATCTTCCGAA
CTCTTGGGCACCACCACCCAATCAGGACAGAGCAGCATGATTCCAGGTGGCTCAATGATCC
AAAGTTCATTAGTGCCCACCTCATCTCAGAGAGTGACAATCCTGAAGATGACAAAGTATACTT
TTTCTTCCGTGAAAATGCAATAGATGGAGAACACTCTGGAAAAGCTACTCACGCTAGAATAG
GTCAGATATGCAAGAATGACTTTGGAGGGCACAGAAGTCTGGTGAATAAATGGACAACATTC
CTCAAAGCTCGTCTGATTTGCTCAGTGCCAGGTCCAAATGGCATTGACACTCATTTTGATGA
ACTGCAGGATGTATTCCTAATGAACTTTAAAGATCCTAAAAATCCAGTTGTATATGGAGTGTT
TACGACTTCCAGTAACATTTTCAAGGGATCAGCCGTGTGTATGTATAGCATGAGTGATGTGA
GAAGGGTGTTCCTTGGTCCATATGCCCACAGGGATGGACCCAACTATCAATGGGTGCCTTAT
CAAGGAAGAGTCCCCTATCCACGGCCAGGAACTTGTCCCAGCAAAACATTTGGTGGTTTTGA
CTCTACAAAGGACCTTCCTGATGATGTTATAACCTTTGCAAGAAGTCATCCAGCCATGTACAA
TCCAGTGTTTCCTATGAACAATCGCCCAATAGTGATCAAAACGGATGTAAATTATCAATTTAC
ACAAATTGTCGTAGACCGAGTGGATGCAGAAGATGGACAGTATGATGTTATGTTTATCGGAA
CAGATGTTGGGACCGTTCTTAAAGTAGTTTCAATTCCTAAGGAGACTTGGTATGATTTAGAAG
AGGTTCTGCTGGAAGAAATGACAGTTTTTCGGGAACCGACTGCTATTTCAGCAATGGAGCTT
TCCACTAAGCAGCAACAACTATATATTGGTTCAACGGCTGGGGTTGCCCAGCTCCCTTTACA
CCGGTGTGATATTTACGGGAAAGCGTGTGCTGAGTGTTGCCTCGCCCGAGACCCTTACTGT
GCTTGGGATGGTTCTGCATGTTCTCGCTATTTTCCCACTGCAAAGAGACGCACAAGACGACA
AGATATAAGAAATGGAGACCCACTGACTCACTGTTCAGACTTACACCATGATAATCACCATG
GCCACAGCCCTGAAGAGAGAATCATCTATGGTGTAGAGAATAGTAGCACATTTTTGGAATGC
AGTCCGAAGTCGCAGAGAGCGCTGGTCTATTGGCAATTCCAGAGGCGAAATGAAGAGCGAA
AAGAAGAGATCAGAGTGGATGATCATATCATCAGGACAGATCAAGGCCTTCTGCTACGTAGT

FIG. 1A

CTACAACAGAAGGATTCAGGCAATTACCTCTGCCATGCGGTGGAACATGGGTTCATACAAAC
TCTTCTTAAGGTAACCCTGGAAGTCATTGACACAGAGCATTTGGAAGAACTTCTTCATAAAGA
TGATGATGGAGATGGCTCTAAGACCAAAGAAATGTCCAATAGCATGACACCTAGCCAGAAGG
TCTGGTACAGAGACTTCATGCAGCTCATCAACCACCCCAATCTCAACACGATGGATGAGTTC
TGTGAACAAGTTTGGAAAAGGGACCGAAAACAACGTCGGCAAAGGCCAGGACATACCCCAG
GGAACAGTAACAAATGGAAGCACTTACAAGAAAATAAGAAAGGTAGAAACAGGAGGACCCA
CGAATTTGAGAGGGCACCCAGGAGTGTCTGAGCTGCATTACCTCTAGAAACCTCAAACAAGT
AGAAACTTGCCTAGACAATAACTGGAAAAACAAATGCAATATACATGAACTTTTTTCATGGCA
TTATGTGGATGTTTACAATGGTGGGAAATTCAGCTGAGTTCCACCAATTATAAATTAAATCCA
TGAGTAACTTTCCTAATAGGCTTTTTTTCCTAATACC (SEQ ID NO:1)

FIG. 1B

GAATTCTCGAGCTCGTCGACCACGCCCTCCTTGTGCAAGAACTCTGAGCCCCAGGTGCAGG
AGGCTGAGGCCTGCAGAGAGACTTGCAGAGAGACCCAGCAAGCCATGGTGTTTCCATGGA
GATGTGAGGGTACTTACTGGGGCTCGAGGAACATCCTGAAGCTGTGGGTCTGGACACTGCT
CTGTTGTGACTTCCTGATACACCATGGAACTCACTGTTGGACTTACCATTATTCTGAAAAGCC
CATGAACTGGGAAAATGCTAGAAAGTTCTGCAAGCAAAATTACACAGATTTAGTCGCCATAC
AAAACAAGAGAGAAATTGAGTATTTAGAGAATACATTGCCCAAAAGCCCTTATTACTACTGGA
TAGGAATCAGGAAAATTGGGAAAATGTGGACATGGGTGGGAACCAACAAAACTCTCACTAAA
GAAGCAGAGAACTGGGGTGCTGGGGAGCCCAACAACAAGAAGTCCAAGGAGGACTGTGTG
GAGATCTATATCAAGAGGGAACGAGACTCTGGGAAATGGAACGATGACGCCTGTCACAAAC
GAAAGGCAGCTCTCTGCTACACAGCCTCTTGCCAGCCAGGGTCTTGCAATGGCCGTGGAGA
ATGTGTGGAAACTATCAACAATCACACGTGCATCTGTGATGCAGGGTATTACGGGCCCCAGT
GTCAGTATGTGGTCCAGTGTGAGCCTTTGGAGGCCCCTGAGTTGGGTACCATGGACTGCAT
CCACCCCTTGGGAAACTTCAGCTTCCAGTCCAAGTGTGCTTTCAACTGTTCTGAGGGAAGAG
AGCTACTTGGGACTGCAGAAACACAGTGTGGAGCATCTGGAAACTGGTCATCTCCAGAGCC
AATCTGCCAAGTGGTCCAGTGTGAGCCTTTGGAGGCCCCTGAGTTGGGTACCATGGACTGC
ATCCACCCCTTGGGAAACTTCAGCTTCCAGTCCAAGTGTGCTTTCAACTGTTCTGAGGGAAG
AGAGCTACTTGGGACTGCAGAAACACAGTGTGGAGCATCTGGAAACTGGTCATCTCCAGAG
CCAATCTGCCAAGAGACAAACAGAAGTTTCTCAAAGATCAAAGAAGGTGACTACAACCCCCT
CTTCATTCCTGTAGCCGTCATGGTCACCGCATTCTCGGGGCTGGCATTTCTCATTTGGCTGG
CAAGGCGGTTAAAAAAAGGCAAGAAATCTCAAGAAAGGATGGATGATCCATACTGATTCATC
CTTTGTGAAAGGAAAGCCATGAAGTGCTAAAGACAAAACATTGGAAAATAACGTCAAGTCCT
CCCGTGAAGATTTTACACGCAGGCATCTCCCACATTAGAGATGCAGTGTTTGCTCAACGAAT
CTGGAAGGATTTCTTCATGACCAACAGCTCCTCCTAATTTCCCCTCGCTCATTCATCCCATTA
ACCCTATCCCATAATGTGTGTCTATACAGAGTAGTATTTTATCATCTTTTCTGTGGAGGAACA
AGCAAAAGTGTTACTGTAGAATATAAAGACAGCTGCTTTTACTCTTTCCTAACTCTTGTTTCCT
AGTTCAATTCAGCACAGAAGCTAATGCCAAACACAGTGAAAATATGATCCATGAGTAATTGGA
AACTCAGACTCCTTGCGCATAGTACGTACCCTATGTAACATCGACAAAAATCTTTCATTTCCA
CCTCCAAAGAACAGTGCTCTATTCAAGTTGGGAAAGTCCTACTTCCTCTGTAGACCCACTAT
CTGTGAGTGACAGCCACTGTAGCTGTTCACATTAACCTTCCCCATCTCCTTTTCCTAGGAGA
ATAATTCCACACACTGCACCCCATGATGGCCACCAAACATCAAAGAAGGGAAAATCTCCTGC
ATTGAGTTTTAGTTTTGAGTTTTCCCTTCTCTTTATTAGATCTCTGATGGTTCCTTGAAGTCAG
TGTTCTGATGATTATTAATAGTTAATGATAACACAACCCACTCTCTTGGAGCTGATGTTATGAA

FIG. 2A

GACAACAGGTAGAAAAATTCCTGGGCTCAGGCTGGAGTGACACCCTTTTCTTTCCCTAACAT
CTTCTACTCAGATACCTAAATTTAAGATTCAGGACAGCTGTCCCCAACTCTTACCATGTCTTT

TATAACTTGCTCCTTAACTTGCCCAACCTGTAGGCTATCTCATTTTCTCGCTTCACTCTGCAA
GGTTTATAACATGATGAATTTAAATAC (SEQ ID NO:2)

FIG. 2B

GTCGACCCACGCGTCCGCAGACCTAGTAGCTGTGGAAACCATGGCCCTGAGTGTCATGTGT
CTGGGCCTTGCCCTGCTTGGGGTCCTGCAGAGCCAGGCCCAGGACTCAACTCAGAACTTGA
TCCCTGCCCCATCTCTGCTCACTGTCCCCCTGCAGCCAGACTTCCGGAGCGATCAGTTCCG
GGGCAGGTGGTACGTTGTGGGCCTGGCAGGCAATGCGGTCCAGAAAAAAACAGAAGGCAG
CTTTACGATGTACAGCACCATCTATGAGCTACAAGAGAACAATAGCTACAATGTCACCTCCAT
CCTGGTCAGGGACCAGGACCAGGGCTGTCGCTACTGGATCAGAACATTTGTTCCAAGCTCC
AGGGCTGGCCAGTTCACTCTGGGAAATATGCACAGGTATCCTCAGGTACAGAGCTACAATG
TGCAAGTGGCCACCACGGACTACAACCAGTTCGCCATGGTATTTTTCCGAAAGACTTCTGAA
AACAAGCAATACTTCAAAATTACCCTGTATGGAAGAACCAAGGAGCTGTCCCCTGAACTGAA
GGAACGTTTCACCCGCTTTGCCAAGTCTCTGGGCCTCAAGGACGACAACATCATCTTCTCTG
TCTGTCTGCCACTCCATCTTTCCTGTTGCCAGAGAGCCACCTGGCTGCCCCACCAGCCACC
ATACCAAGGAGCATCTGGAGCCTCTTCTTATTTGGCCAGCACTCCCCATCCACCTGTCTTAA
CACCACCAATGGCGTCCCCTTTCTGCTGAATAAATACATGCCCCCAAAAAAAAAAAAAAAGG
GCGGCCGC (SEQ ID NO:3)

FIG. 3A

MALSVMCLGLALLGVLQSQAQDSTQNLIPAPSLLTVPLQPDFRSDQFRGRWYVVGLAGNAVQK
KTEGSFTMYSTIYELQENNSYNVTSILVRDQDQGCRYWIRTFVPSSRAGQFTLGNMHRYPQVQS
YNVQVATTDYNQFAMVFFRKTSENKQYFKITLYGRTKELSPELKERFTRFAKSLGLKDDNIIFSVC
LPLHLSCCQRATWLPHQPPYQGASGASSYLASTPHPPVLTPPMASPFC (SEQ ID NO:4)

FIG. 3B

CCCCTTTTGGTTTTTGTTCTATCGACCCTAACAAGCTTAGTAATCGATGCCACTCGAGGCCAA
GAATTCATTACGAGCCTGAGCTCCTTCGGCTTTTTCCCCCCTTTTGCATCTTGTTTCCCGGGA
TACCTGCAACTCAAGGATGGATGCCCTGAGACTGGCAAATTCAGCTTTTGCTGTTGACTTGT
TCAAACAACTATGTGAAAGGGACCCAGCAGGAAACATTCTCTTCTCTCCAATATGCCTCTCTA
CTTCTCTGTCCCTTGCGCAAGTGGGCACCAAAGGCGACACAGCAAATGAAATTGGACAGGT
CCTTCATTTTGAGAATGTCAAAGATGTACCCTTTGGGTTTCAAACAGTCACTTCTGATGTTAA
TAAGCTCAGTTCTTTTTACTCTTTGAAACTTGTCAAGCGACTCTACATAGACAAATCTCTGAAC
CCTTCTACAGAATTTATCAGTTCTACCAAAAGACCATATGCAAAAGAATTGGAAACTGTTGAC
TTCAAAGACAAACTGGAAGAAACGAAAGGTCAAATTAACAGCTCCATTAAGGAGCTCACAGA
TGGCCACTTTGAGGACATTTTGTCAGAGAACAGTATAAGTGACCAGACCAAAATCCTTGTGG
TTAATGCTGCCTACTTTGTTGGAAAGTGGATGAAGAAATTTCCGGAATCAGAAACAAAAGAAT
GTCCTTTCAGAATCAGCAAGACAGACACCAAACCCGTACAAATGATGAATCTTGAGGCCACT
TTCTGCTTGGGTAACATTGATGACATCAGCTGTAAGATCATAGAACTTCCTTTCCAGAATAAG
CATCTGAGTATGCTCATTGTGCTCCCCAAGGACGTGGAGGATGAGTCCACAGGCCTGGAGA
AGATTGAACAGCAACTCAACCCAGAAACATTGTTACAGTGGACCAACCCCAGTACCATGGCC
AATGCCAAAGTCAAACTTTCCCTCCCAAAGTTTAAGGTAGAAAAGATGATTGATCCCAAGGCT
AGTCTGGAAAGCCTAGGGCTGAAAAGTCTCTTCAATGAAAGTACATCGGATTTCTCTGGAAT
GTCAGAGACCAAGGGAGTGTCCCTGTCAAATGTGATTCATAGAGTATGCCTAGAAATAACCG
AAGATGGTGGTGAGTCCATCGAGGTGCCAGGGTCCCGGATCTTACAGCACAAGGATGAATT
CAATGCTGACCATCCATTTATTTATATCATTAGACACAACAAAACTCGAAACATCATTTTCTTT
GGCAAATTCTGTTCTCCTTAGCTGGCAGGGCCTTGCCAAGTCTCAGGGAACTTGTCTGTAGT
CGCAGAGCTCTGTAAACTTTGTATCCAGACAATCACTTTCTATACAATAAATTGTAAATGTTG
CTGAAAAAAAAAAAAAAAAAAAAAAA (SEQ ID NO:5)

FIG. 4

GGTGGAGACTAAATATAATCTTTTATTTTATCGATGTTAACAAGCTTAGTAATCGATGCCACG
TCGAGGGGTGTCGACCCACGCGTCTCGCTTGCCTGTTCCTTTTCCACGCATTTTCCAGGATA
ACTGTGACTCCAGGCCCGCAATGGATGCCCTGCAACTAGCAAATTCGGCTTTTGCCGTTGAT
CTGTTCAAACAACTATGTGAAAAGGAGCCACTGGGCAATGTCCTCTTCTCTCCAATCTGTCT
CTCCACCTCTCTGTCACTTGCTCAAGTGGGTGCTAAAGGTGACACTGCAAATGAAATTGGAC
AGGTTCTTCATTTTGAAAATGTCAAAGATGTACCCTTTGGATTTCAAACAGTAACATCGGATG
TAAACAAACTTAGTTCCTTTTACTCACTGAAACTAATCAAGCGGCTCTACGTAGACAAATCTC
TGAATCTTTCTACAGAGTTCATCAGCTCTACGAAGAGACCCTATGCAAAGGAATTGGAAACT
GTTGACTTCAAAGATAAATTGGAAGAAACGAAAGGTCAGATCAACAACTCAATTAAGGATCTC
ACAGATGGCCACTTTGAGAACATTTTAGCTGACAACAGTGTGAACGACCAGACCAAAATCCT
TGTGGTTAATGCTGCCTACTTTGTTGGCAAGTGGATGAAGAAATTTCCTGAATCAGAAACAAA
AGAATGTCCTTTCAGAGTCAACAAGACAGACACCAAACCAGTGCAGATGATGAACATGGAGG
CCACGTTCTGTATGGGAAACATTGACAGTATCAATTGTAAGATCATAGAGCTTCCTTTTCAAA
ATAAGCATCTCAGCATGTTCATCCTACTACCCAAGGATGTGGAGGATGAGTCCACAGGCTTG
GAGAAGATTGAAAAACAACTCAACTCAGAGTCACTGTCACAGTGGACTAATCCCAGCACCAT
GGCCAATGCCAAGGTCAAACTCTCCATTCCAAAATTTAAGGTGGAAAAGATGATTGATCCCA
AGGCTTGTCTGGAAAATCTAGGGCTGAAACATATCTTCAGCGAAGACACATCTGATTTCTCT
GGAATGTCAGAGACCAAGGGAGTGGCCCTATCAAATGTTATCCACAAAGTGTGCTTAGAAAT
AACTGAAGATGGTGGGGATTCCATAGAGGTGCCAGGAGCACGGATCCTGCAGCACAAGGAT
GAATTGAATGCTGACCATCCCTTTATTTACATCATCAGGCACAACAAAACTCGAAACATCATT
TTCTTTGGCAAATTCTGTTCTCCTTAAGTGGCATAGCCCATGTTAAGTCCTCCCTGACTTTTC
TGTGGATGCCGATTTCTGTAAACTCTGCATCCAGAGATTCATTTTCTAGATACAATAAATTGC
TAATGTTGCTGGATCAGGAAGCCGCCAGTACTTGTCATATGTAGCCTTCACACAGATAGACC
TTTTTTTTTTTTTCCAATTCTATCTTTTGTTTCCTTTTTTCCCATAAGACAATGACATACGCTTTT
AATGAAAAGGAATCACGTTAGAGGAAAAATATTTATTCATTATTTGTCAAATTGTCCGGGGTA
GTTGGCAGAAATACAGTCTTCCACAAAGAAAATTCCTATAAGGAAGATTTGGAAGCTCTTCTT
CCCAGCACTATGCTTTCCTTCTTTGGGATAGAGAATGTTCCAGACATTCTCGCTTCCCTGAAA
GACTGAAGAAAGTGTAGTGCATGGGACCCACGAAACTGCCCTGGCTCCAGTGAAACTTGGG
CACATGCTCAGGCTACTATAGGTCCAGAAGTCCTTATGTTAAGCCCTGGCAGGCAGGTGTTT
ATTAAAATTCTGAATTTTGGGGATTTTCAAAAGATAATATTTTACATACACTGTATGTTATAGAA
CTTCATGGATCAGATCTGGGGCAGCACCCTATAAATCACCACCTTAATATGCTGCAACAAAA
TGTAGAATATTCAGACAAAATGGATACATAAAGACTAAGTAGCCCATAAGGGGTCAAATTTTG
CTGCCAAATGCGTATGCCACCAACTTACAAAAACACTTCGTTCGCAGAGCTTTTCAGATTGT

FIG. 5A

GGAATGTTGGATAAGGAATTATAGACCTCTAGTAGCTGAAATGCAAGACCCCAAGAGGAAGT
TCAGATCTTAA (SEQ ID NO:6)

FIG. 5B

Figure 6

	Semaphorin D	Maspin	B94	mel-14 Antigen	24p3	Proliferin
Expression in EMT6 tumors	Up-regulated in CDDP resistant tumor	Down-regulated in CDDP resistant tumor	Up-regulated in CDDP resistant tumor	Up-regulated in CDDP resistant tumor	Up-regulated in CDDP resistant tumor	Up-regulated in CDDP resistant tumor
Expression in EMT6 cell lines	Remain up-regulated in CDDP resistant cell line to passage 13 (passage 3, 6, 10, and 13 checked)	Remain down-regulated in CDDP resistant cell line to passage 3	Remain up-regulated in CDDP cell line to passage 10	Remain up-regulated in CDDP cell line to passage 10	Remain up-regulated in CDDP cell line to passage 10	Remain up-regulated in CDDP cell line to passage 10
Expression in multi-cell line pairs (A2780, UCLA, U937, HL60, SCC25 pairs)	Higly expressed in SCC25 CDDP cell line, not significant-ly expressed in other cell line pairs.	Highly expressed in SCC25 wild type cell line (and HL60 AD cell line), not signifi-cantly expressed in other cell line pairs.	Different-ially expressed in HL60 and U937 cell lines (lower in resistant cell line).	Different-ially expressed in HL60 cell lines (high in HL60 and HL60Rev, low in HL60AD)	Slightly up-regulated in SCC25 CDDP cell line; not signifi-cantly different-ially expressed in other cell line pairs.	Slightly up-regulated in A2780AD and SCC25 CDDP cell lines; Not signifi-cantly differ-entially expressed in other cell line pairs.